

MATERIAL SAFETY DATA SHEET



LIQUID CARBONIC

SPECIALTY GAS CORPORATION

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Gaseous Nitrogen

Revision

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DPm 154-1, -2

Emergency Phone Numbers: (504) 673-8831; CHEMTREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Nitrogen
COMMON NAME AND SYNONYMS: Gaseous Nitrogen, Nitrogen Gas, GN_2
CHEMICAL FAMILY: Inert Gas FORMULA: N_2

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1985-6 ACGIH TLV UNITS
Nitrogen	99.9%	7727-37-9	Nitrogen is a simple asphyxiant.

SECTION III--PHYSICAL DATA

BOILING POINT (°F.)	-320.4°	SPECIFIC GRAVITY ($\text{H}_2\text{O}=1$)	0.809 @B.P.
VAPOR PRESSURE (mmHg.)	@-320.4° - 760	% VOLATILE BY VOLUME	100.0
VAPOR DENSITY (AIR=1)	0.967	EVAPORATION RATE	Gas
SOLUBILITY IN WATER	Slightly	(BUTYL ACETATE=1)	
APPEARANCE AND ODOR	Colorless and Odorless		

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

	LEL	UEL
FLASH POINT (METHOD USED)	N/A	N/A
EXTINGUISHING MEDIA:	Non-Flammable Inert Gas	
SPECIAL FIRE FIGHTING PROCEDURES:	Non-flammable and will not support combustion.	
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Non-flammable. No unusual hazard except when compressed gas is exposed to a fire, containers may rupture violently if safety devices fail to relieve pressure.	

SECTION V--HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Nitrogen is non-toxic and is classified as a simple asphyxiant by displacement of oxygen.

EFFECTS OF OVEREXPOSURE: Dizziness, unconsciousness, death

EMERGENCY AND FIRST AID PROCEDURES: If inhaled removed to fresh air. Administer air or oxygen. Obtain prompt medical attention. Give cardiopulmonary resuscitation. Rescuers need to be concerned with their own safety in oxygen deficient areas. Use self-contained breathing equipment. Nitrogen can cause rapid suffocation. Oxygen levels should be maintained at greater than 18% by volume at normal atmospheric pressure which is equivalent to a partial pressure of 135mm Hg.

ROUTE(S) OF ENTRY:	INHALATION?	yes	SKIN?	No	INGESTION?	No
CARCINOGENICITY:	NTP?	No	IARC MONOGRAPHS?	No	OSHA?	No

SECTION VI--REACTIVITY DATA

STABILITY: UNSTABLE () STABLE (X)

CONDITIONS TO AVOID: N/A

INCOMPATIBILITY (MATERIALS TO AVOID): Inert except at high temperatures

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: MAY OCCUR () WON'T OCCUR (X)

CONDITIONS TO AVOID: N/A

SECTION VII--SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Evacuate all personnel from affected area. To enter spill area, use self-contained breathing equipment. Maintain adequate ventilation to avoid oxygen deficiency.

WASTE DISPOSAL METHOD: No waste disposal problem. Gas will diffuse into atmosphere.

SECTION VIII--SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Self-contained breathing apparatus or pressure demand air supply mask.

VENTILATION: LOCAL EXHAUST (X) Use at points of release to maintain over 18% oxygen in air.
MECHANICAL (GENERAL) ()

PROTECTIVE GLOVES: Cotton or leather. EYE PROTECTION: Goggles or glasses

OTHER PROTECTIVE EQUIPMENT: Low oxygen alarm where necessary; Safety shoes

SECTION IX--SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Protect containers from physical damage. Use only DOT or ASME coded storage vessels. Follow normal compressed gas storage practices. Store in cool and dry ventilated areas.

OTHER PRECAUTIONS: Refer to CGA Bulletin SB-2 and pamphlets P-9 and P-14.

SB-2 -- "Oxygen Deficient Atmospheres"

P-9 -- "The Inert Gases Argon, Nitrogen and Helium"

P-14 -- "Accident Prevention in Oxygen-Rich and Oxygen-Deficient Atmospheres"

Use a check valve or trap in the nitrogen cylinder discharge line to prevent hazardous backflow. Cylinders or containers must not be recharged except by or with the consent of Liquid Carbonic.

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No. 199